



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

646.9710
Job Sheet 200367



Part No: 646.9710
Part Name: Body



Part Weight: 0 lbs
Job Created: 9/10/19
Due Date: 10/15/19
Type: Stock

SPUT DAS
Job Qty: 20 pcs
21
9-00
9 2019-11-28

Status: New
Job Tracking No:
Created By: Marie Lajeunesse
Description:

Priority: Medium

Note: DWG 646.9700 REV.H IPP REV:A NEW ISSUE 12/10/04 JFS VERIFY BY: DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	HAAS 4 Axis	20 pcs	10/15/19		0.22	10.00	HAAS - 1		
							HAAS - 2		
							HAAS - 3		
							HAAS - 4		
120	QC 2	20 pcs	10/15/19		0.00	0.00	QC 2 - 1		B.A./M 2019/10/31
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 57		
							QC 2 - 62		
							QC 2 - 63		
							QC 2 - 8		B.A. 19-11-03

130 QC 8	20 pcs	10/15/19	0.00 0.00	QC 2 - 66	
				QC 2 - 64	
				QC 2 - 65	
				QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
				QC 8 - 12	
				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	mark 19/11/08
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
				QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	
				QC 8 - 52	
				QC 8 - 23	
				QC 8 - 57	
				QC 8 - 76	
140 Outsource - 4 - Anodize	20 pcs	10/15/19		ATG001-VC 10	2019-11-08
150 Packaging 2-1 - Receive - B4B	20 pcs	10/15/19	0.00 0.00	Packaging 2 - 1 - B4B	
				Packaging 2 - 2 - B4B	
				Packaging 2 - 3 - B4B	
				Packaging 2 - 5 - B4B	DEC 05 2019
				Packaging 2 - 4 - B4B	
				Packaging 2 - 6 - B4B	
				Packaging 2 - 7 - B4B	
				Packaging 2 - 8 - B4B	
				Packaging 2 - 9 - B4B	
				Packaging 2 - 10 - B4B	
				Packaging 2 - 11 - B4B	
				Packaging 2 - 12 - B4B	
				Packaging 2 - 13 - B4B	
				Packaging 2 - 14 - B4B	
				Packaging 2 - 15 - B4B	
				Packaging 2 - 16 - B4B	
				Packaging 2 - 17 - B4B	
				Packaging 2 - 18 -	

				B4B	
				Packaging 2 - 19 - B4B	
				Packaging 2 - 20 - B4B	
				Packaging 2 - 21 - B4B	
				Packaging 2 - 22 - B4B	
				Packaging 2 - 23 - B4B	
				Packaging 2 - 24 - B4B	
				Packaging 2 - 25 - B4B	
				Packaging 2 - 26 - B4B	
				Packaging 2 - 27 - B4B	
				Packaging 2 - 28 - B4B	
				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	
155 QC 6	20 pcs	10/15/19	0.00 0.00	QC 6 - 9	
				QC 6 - 68	JAN 16 2020
				QC 6 - 61	DAS 68
				QC 6 - 40	Q-89
				QC 6 - 81	
160 Spray Paint - 2 - B4B	20 pcs	10/15/19	0.00 3.33	Spray Paint - 1 - B4B	
				Spray Paint - 2 - B4B	
				Spray Paint - 3 - B4B	
				Spray Paint - 4 - B4B	
165 QC 14	20 pcs	10/15/19	0.00 0.00	QC 14 - 15	
				QC 14 - 2	
				QC 14 - 34	
				QC 14 - 41	
				QC 14 - 51	
				QC 14 - 58	
				QC 14 - 59	
				QC 14 - 9	
				QC 14 - 68	
				QC 14 - 40	
				QC 14 - 19	
				QC 14 - 43	
				QC 14 - 24	
				QC 14 - 61	
				QC 14 - 81	
180 Packaging 3-1 - Stock - B4B	20 pcs	10/15/19	0.00 0.00	Packaging 3 - 1 - B4B	

				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	DAS
				Packaging 3 - 7 - B4B	28
				Packaging 3 - 8 - B4B	9-89
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
190 QC 21 - SA	20 pcs	10/15/19	0.00 0.00	QC 21 - SA - 21	DAS
				QC 21 - SA - 70	21 JAN 17 2020
				9-89	
				Plex 9/10/19 2:55 PM Dart.lajeunesse.marie	

QC 21 - SA - 53

Part Op 110 - (HAAS CNC Vertical Machine), 1-Machine per folio FB130
Descriptions: 120 - (QC2- Inspect parts off machine FAI/FAIB)
130 - (QC8- Inspect parts - second check)
140 - (Outsource process-Anodize per QSI017 4.1.10.1), Issue P/O to: 48054 Hard Black Anodize Color Black and Prime as per Dwg 646.9700
150 - (Receive & Inspect for Damage & Mat'l Certs)
155 - (QC6- All purchased or subcontracted products)
160 - (Spray Paint / NDT Room)-PRIME CARDINAL 7760-4702 LOW VOC EPOXY PRIMER (LIGHT GRAY)
165 - (QC14- Inspect Spray Paint)
180 - (Identify as per dwg & Stock Location: _____), ***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***
190 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M7075T6S1.000X5.000	7075-T6 Sheet1" Thick Plate X 5" Wide	12.4200 ft (.621 ea)	110-HAAS 4 Axis	<u>526073</u> <u>5223519</u>

MAT
used
8.037'
4.316'

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
110-HAAS 4 Axis	M7075T6S1.000X5.000	12	16	0

Part Specifications

Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Body	0.130Inches ± 0.010	0.140 0.120	<u>.130</u>	
2	Body	45.0Angle ± 0.5	45.5 44.5	<u>45°</u>	
3	Body	1.500Inches ± 0.005	1.505 1.495	<u>1.502</u>	
4	Body	0.352Inches + 0.005 - 0.000	0.357 0.352	<u>.353</u>	
5	Body	0.100Inches ± 0.010	0.110 0.090	<u>.103</u>	
6	Body	45.0Angle ± 0.5	45.5 44.5	<u>45°</u>	
7	Body	0.875Inches ± 0.005	0.880 0.870	<u>.879</u>	
8	Body	0.700Inches ± 0.005	0.705 0.695	<u>.701</u>	
9	Body	5.500Inches ± 0.005	5.505 5.495	<u>5.501</u>	
10	Body	0.660Inches ± 0.005	0.665 0.655	<u>.659</u>	
11	Body	0.660Inches ± 0.005	0.665 0.655	<u>.660</u>	
12	Body	0.278Inches ± 0.002	0.280 0.276	<u>.277</u>	
13	Body	0.339Inches ± 0.002	0.341 0.337	<u>.339</u>	
14	Body	0.352Inches ± 0.002	0.354 0.350	<u>.351</u>	
15	Body	0.372Inches ± 0.002	0.374 0.370	<u>.371</u>	
16	Body	1.067Inches ± 0.002	1.069 1.065	<u>1.067</u>	
17	Body	2.608Inches ± 0.002	2.610 2.606	<u>2.608</u>	
18	Body	2.750Inches ± 0.002	2.752 2.748	<u>2.750⁵</u>	
19	Body	2.892Inches ± 0.002	2.894 2.890	<u>2.891</u>	
20	Body	3.348Inches ± 0.002	3.350	<u>3.3475</u>	

4.843
327

			3.346	
21	Body	3.597Inches ± 0.002	3.599 3.595	3.596 ^s
22	Body	3.847Inches ± 0.002	3.849 3.845	3.845
23	Body	0.351Inches ± 0.002	0.353 0.349	.351 ^s
24	Body	0.544Inches ± 0.002	0.546 0.542	.545
25	Body	2.195Inches ± 0.002	2.197 2.193	2.196
26	Body	2.304Inches ± 0.002	2.306 2.302	2.304 ^s
27	Body	2.451Inches ± 0.002	2.453 2.449	2.451 ^s
28	Body	2.639Inches ± 0.002	2.641 2.637	2.640
29	Body	3.395Inches ± 0.002	3.397 3.393	3.396
30	Body	3.495Inches ± 0.002	3.497 3.493	3.496
31	Body	4.551Inches ± 0.002	4.553 4.549	4.552
32	Body	4.595Inches ± 0.002	4.597 4.593	4.596
33	Body	4.687Inches ± 0.002	4.689 4.685	4.687 ^s
34	Body	4.734Inches ± 0.002	4.736 4.732	4.735 ^s
35	Body	6.651Inches ± 0.002	6.653 6.649	6.651 ^s
36	Body	0.201Inches + 0.005 - 0.001	0.206 0.200	.201 ∅
37	Body	0.177Inches + 0.005 - 0.001	0.182 0.176	.177 ∅
38	Body	7.026Inches ± 0.005	7.031 7.021	7.026
39	Body	4.245Inches ± 0.005	4.250 4.240	4.243

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3.156

Job: _____ Part No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐		DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐	
Date :	Sequence #:	QTY Affected :		MRB (QS1042)	
Description Work Order Deviation		Disposition			
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY			
		Pressure/Forced Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Other/Details:		Contamination Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐	
		Power Loss/Surge Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐		Positioned Wrong Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread ☐	
		Completed By		Lead hand / Supervisor	
		QC / QA Coordinator			



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB045054



Supplier: ATG001-VC
A.T.G. Industries Inc
760 INDUSTRIELLE STREET
ROCKLAND
ON
K4K 1T2 Canada
Phone: 613-446-4544
Fax: 613-446-4556

Attention: Lalande, Marc-Andre

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB045054

PO Date: 11/8/19

Due Date: 11/25/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Ground

Pynt Terms: Net 60

Freight Terms:

Special Comments:

2019-11-15

Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	200984	646.3011	646.3000 Rev NC	RH Half : Various STC's (Outsource process-Anodize per QSI017 4.1.10.1) Issue P/O to ATG : Hard Black Anodize, Color Black and Prime as Per Dwg 646.3000	Firmed X30	-	11/25/19	30 pcs	0 pcs	30 pcs	\$12.14/pcs	\$364.20
2	202594	647.7913	647.7900 Rev NC	Doubler : Various STC's Issue P/O ATG, black anodize and prime as per dwg 647.7913 Rev. A	Firmed X16	-	11/25/19	16 pcs	0 pcs	16 pcs	\$9.29/pcs	\$148.64
3	200367	646.9710	646.9700 Rev H	Body : Various STC's (Outsource process-Anodize per QSI017 4.1.10.1), Issue P/O to: Hard Black Anodize Color Black and Prime as per Dwg 646.9700	Firmed X11 X9	-	11/25/19	20 pcs	0 pcs	20 pcs	\$16.39/pcs	\$327.80
Grand Total:												\$840.64



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER
POHB045054



Order Notes

Procurement Quality Clauses

- A005 right of entry
- A012 chemical and physical test report
- A016 personnel qualification
- A017 raw material identification (as applicable)

- A022 Apical Processing
- A024 process certifications
- A026 certification of material conformance

- A041 quality management system
- A042 dart notification by supplier
- A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 11/15/19 1:14 PM Dart.Guerin.Kimberley



A.T.G. Industries Inc.
760 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 919121

Date: 04-Dec-19

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Patrick Lussier
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		ATG Delivery	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
30 ea	Part: 646.3011 RH Half Hard Black Anodize per MIL-A-8625F, Type III, Class2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Batch/Lot# <u>120908</u> Expiry Date: <u>10/20</u> Job: 26437 Line: 1 PO: POHB045054	Rev: NC	
9 ea	Part: 646.9710 Body Hard Black Anodize per MIL-A-8625F, Type III, Class2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0001-.0002" (.1 - .2 mils) per drawing. Batch/Lot# <u>120908</u> Expiry Date: <u>10/20</u> Job: 26439 Line: 3 PO: POHB045054	Rev: H	
CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements. Date: <u>DEC 04 2019</u> Certified Signature: <u>[Signature]</u> Receiver Signature: _____ Made in Canada.			

RECEIVED
DEC 04 2019
DART AEROSPACE LTD.



A.T.G. Industries Inc.
760 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 919121

Date: 04-Dec-19

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Patrick Lussier
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via
		ATG Delivery
Quantity	Description	
	A.T.G Industries Inc. is AS9100 Registered and Nadcap Chemical Processing Accredited.	
	Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt.	

John Chuprun

From: David Duval
Sent: Thursday, January 16, 2020 1:09 PM
To: Patrick Duval; John Chuprun
Subject: FW: CCK primer

From: Jacob Becker <jbecker@dartaero.com>
Sent: Thursday, January 16, 2020 1:08 PM
To: David Duval <dduval@dartaero.com>; Steven Drouin <sdrouin@dartaero.com>
Subject: RE: CCK primer

Hi David,

Per our conversation, it is acceptable to reference section 4.2 of MPP-172 **PRIMER IAW MIL-PRF-23377 TYPE I CLASS N** in place of section 4.3 for purposes of priming the cable cutter body.

Regards,

JACOB BECKER
Project/Sustaining Engineer

DART AEROSPACE
T 1 760 509-1639
M 1 760 691-9108
F 1 760 758-9612
1-800-556-4166
www.dartaerospace.com



From: David Duval
Sent: Thursday, January 16, 2020 8:59 AM
To: Jacob Becker <jbecker@dartaero.com>; Steven Drouin <sdrouin@dartaero.com>
Subject: CCK primer

Hi Jacob.

- We just receive part from a outsource supplier for the Anodize and Primer. They are 646.9710 body. They primed the bodies with the **PRIMER IAW MIL-PRF-23377 TYPE I CLASS N** as per MPP-172 4.2. instead of the **PRIMER CARDINAL 7760-4702 LOW VOC EPOXY PRIMER (LIGHT GRAY)** that is call on the dwg. Is this acceptable?

Thanks
David Duval